



TRAFFIC CONES MGS-93-06E

1.0 DESCRIPTION. This specification covers traffic cones for department work.

1.1 Unless otherwise stated, specification section references are from the version, in effect at the time of this order, of the Missouri Standard Specifications for Highway Construction and its supplements.

2.0 MATERIALS.

2.1 General. Traffic cones shall be constructed of polyvinyl chloride, and shall be fluorescent red-orange in color.

2.1.1 The cones may be either molded in one piece or the upper conical portion shall be permanently fused and joined to the base section forming one integral unit.

2.1.2 The cones shall be capable of nesting neatly and be easily separated when stacked.

2.2 Twelve (12) Inch Traffic Cones.

2.2.1 Base. The base shall be square and shall have a minimum dimension of 8 1/4 inches on each side.

2.2.2 Cone. The cone shall comply with the following dimensions:

Top wall thickness, inch, min.	0.065
Bottom wall thickness, inch, min.	0.10

2.2.3 The complete unit (base and cone) shall have a minimum weight of 1 1/4 pounds and shall have a minimum height of twelve (12) inches.

2.3 Twenty-Eight (28) Inch Traffic Cones.

2.3.1 Base. The base shall be square and shall have a minimum dimension of 14 inches on each side.

2.3.1.1 The base shall be weighted to provide a low center of gravity for maximum stability. The weight of the base shall be at least 60 percent of the total weight of the cone.

2.3.2 Cone. The cone shall comply with the following dimensions:

Outside diameter at base, inches, min.	10
Outside diameter at top, inches, min.	2
Wall thickness 1 inch below the top, inch, min.	0.075
Wall thickness 1 inch above the base, inch, min.	0.10

2.3.3 The cone must be self-supporting with no appreciable slump or sag after four hours exposure at a temperature of 150⁰ F.

2.3.4 After four hours exposure at a temperature of 10⁰ F, the cones must withstand a 180⁰ bend with no evidence of cracking, splitting, breaking, or other distress. This test shall be made immediately upon removal of the specimen from the temperature chamber.

2.3.5 The cone, when placed in its normal position on a flat surface and folded at a point near the middle of its vertical height so that the upper tip touches the surface on which the base is resting, will return to its original vertical position within 20 seconds. The cone should be at ambient room temperature when tested.

2.3.6 The opening at the top of the cone shall be reinforced with a bead or lip to prevent tearing.

2.3.7 The complete unit (base and cone) shall have a minimum weight of 7 pounds and shall have a minimum height of twenty-eight (28) inches.

2.4 Twenty-Eight (28) Inch Traffic Cones with Retroreflective Marking.

2.4.1 Twenty-eight (28) inch traffic cones with retroreflective marking shall meet the requirements specified in Section 2.3 of this specification.

2.4.2 The cones shall be reflectorized with Type 3 retroreflective sheeting in accordance with the requirements of Sec 1042, and designed for use on flexible traffic cones.

2.4.3 Retroreflectorization of cones shall be provided by a minimum 6 inch wide white band placed a minimum of 3 inches but not more than 4 inches from the top of the cone. An additional 4 inch wide white band shall be placed a minimum of 2 inches below the 6 inch band.

3.0 ORDERING INFORMATION. The type of cone is to be as shown in the order.

4.0 CERTIFICATION. The supplier shall submit a manufacturers certification at destination certifying that the cones, and retroreflective sheeting if being furnished, is in accordance with all requirements of these specifications. The certification shall include specific results for the properties specified herein.

5.0 ACCEPTANCE. Acceptance of traffic cones will be based on a satisfactory manufacturer's certification, visual inspection, and any tests deemed necessary by the department. If testing is required, samples will be taken at the destination.